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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/559,817	04/25/2000	Alan K. Walbeck	INTELOG.034A	2997

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EXAMINER	
BILGRAMI, ASGHAR H	

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 11/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/559,817	WALBECK ET AL.	
	Examiner	Art Unit	
	Asghar Bilgrami	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *25 April 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *02/11/02, 11/22/2000*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07-August-2006 has been entered.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-27 rejected under 35 U.S.C. 103(a) as being unpatentable over Beyda et al (U.S. 5,935,218) and further in view of Ratner et al (U.S. 5,684,826).

3. As per claims 1, 13, 17 & 25, Beyda discloses a method for arbitrating use of a network medium to avoid collisions caused by multiple nodes attempting to transmit data on the network medium at the same time, said method comprising the steps of:

sending a token packet from an active server to a first client node (col. 2, lines 37-67 & col.3, lines 1-11), sending an end of token session packet from said first client to said server (col. 3, lines 12-76, col.4, lines 1-9 & col.5, lines 40-49).

In the same field of endeavor Beyda did not disclose in detail the waiting for a prescribed time period to allow a second client node to send a lineup insertion packet to said active server.

However Ratner discloses that in order to avoid collision data can be buffered in the processor before being sent to its destination (col.5, lines 40-67 & col.6, lines 1-38).

One in the ordinary skill in the art can establish the relationship between lining up insertion packets and buffering data before dissemination.

Accordingly it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate buffering of data while waiting to transmit on the channel as described by Ratner with Beyda's art which describes a client/server data communication/transfer network system. In doing so it would result in minimizing the collision of packets and improving the traffic and reliability of the network and as result making the network more robust and scalable.

4. As per claim 2, Beyda-Ratner disclosed the method of Claim 1, wherein said active network server maintains a lineup card that lists one or more client nodes (Ratner, col.5, lines 40-67 & col.6, lines 1-38).

5. As per claim 3, Beyda-Ratner disclosed the method of Claim 1, wherein said token packet specifies a maximum number of packets that said first client can send before sending said end of token session packet (Beyda, (col. 3, lines 12-76 & col.4, lines 1-9).

6. As per claim 4, Beyda-Ratner disclosed the method of Claim 3, wherein said first client node is allowed to transmit data packets on said network medium only during a token session (Beyda, col. 3, lines 12-76 & col.4, lines 1-9).

7. As per claim 5, Beyda-Ratner disclosed the method of Claim 3, wherein said first client node is removed from said lineup card when said node has been inactive for a period of time (Ratner, col.5, lines 40-67 & col.6, lines 1-57).

8. As per claim 6, Beyda-Ratner disclosed the method of Claim 3., wherein said lineup insertion packet requests insertion onto a high priority queue (Beyda, col. 3, lines 12-76).

9. As per claim 7, Beyda-Ratner disclosed the method of Claim 1 wherein a presence of a packet is detected by matching a specified preamble and length sequence (Ratner, col. 7, lines 43-56).

10. As per claim 8, Beyda-Ratner disclosed the method of Claim 1, wherein access to said medium is provided by a media access control layer (Beyda, col. 6, lines 3-12).

11. As per claims 9 & 20, Beyda-Ratner disclosed the method of Claim 8, wherein said media access control layer provides a burst mode (Beyda, col. 5, lines 2-49 & col.6, lines 1-12).

12. As per claims 10, 18 &19, Beyda-Ratner disclosed the method of Claim 1, wherein said medium provides multiple channels (Ratner, col. 3, lines 59- 67 & col. 4, lines 1-32).

13. As per claims 11, 21 & 26, Beyda-Ratner disclosed the method of Claim 1, wherein said medium is a power line (Ratner, col. 2, lines 46-67 & col.3, lines 34-58).

14. As per claims 12, 22 & 27 Beyda-Ratner disclosed the method of Claim 1, wherein said medium is a radio frequency transmission medium (Ratner, col. 1, lines 17-28).

15. As per claim 14, Beyda-Ratner disclosed the network architecture of Claim 13, wherein said active server node maintains a lineup card of active client nodes, said lineup card comprising a high priority queue and a low priority queue (Ratner, col. 5, lines 40-67 & col. 6, lines 1- 38).

16. As per claim 15, Beyda-Ratner disclosed the network architecture of Claim 13, wherein said active server node polls all nodes listed on said high priority queue before polling a next node listed on said low priority queue (Beyda, col.3, lines 11-61)

17. As per claim 16, Beyda discloses a method for transmitting data on a network medium, said network medium comprising a plurality channels, comprising: obtaining a plurality of data packets in a source node; transmitting said data packets, one data packet per channel, to a destination node (Beyda, col.2, lines 37-67, col. 3, lines 1- 67 & col. 6, lines 3- 12).

In the same field of endeavor Beyda does not describe in detail of transmitting a multi-channel acknowledgement from said destination node to a said source node, said multi-

channel acknowledgement transmitted on all of said channels, said multi-channel acknowledgement providing acknowledgement information for each of said channels. However Ratner discloses multiple simultaneous communications over a network to acknowledge information transferred (Ratner, col. 9, lines 38-67 & col.10, lines 1-39). It would have been obvious to one in the ordinary skill in the art at the time the invention was made to incorporate multi-channel acknowledgement functionality as described by Ratner with a network transmitting data as described by Beyda to improve the reliability of the transmitted data on the network.

18. As per claim 23, Beyda-Ratner disclosed the data network of Claim 17, wherein each of said active server prioritizes a plurality of client node means (Beyda, col. 2, lines 37-67 & col. 3, lines 1- 61).

19. As per claim 24, Beyda disclosed a method for sending data on a multi-channel network medium comprising the steps of: sending said plurality of fragments to a destination node (col. 3, lines 1- 61 & col. 6, lines 2-12). In the same field of endeavor Beyda did not disclose in detail receiving a response indicating which of plurality of said fragments were received and which of said plurality of said fragments that were lost; and resending said fragments that were lost.

However Ratner disclosed the verification process whether the data bytes transmitted have reached their destination (col. 7, lines 57-67, col.8, lines 1-67 & col.9, lines 1-17). It would have been obvious to one in the ordinary skill in the art to incorporate verification of the sent data and resending the data that was lost as described by Ratner

with sending plurality of fragments to a destination node as taught by Beyda so as to improve the effectiveness and robustness of the network and achieve assured communications.

Response to Arguments

20. Applicant's arguments filed on 12 December 2004 have been fully considered but they are not persuasive.

21. Applicant argued that neither Bayada nor Ratner disclose "lineup insertion packet" and "end of session indicator.

22. As to applicant argument Bayada clearly discloses that the node that is currently not transmitting waits until all the data has been transmitted by the active transmitting node therefore it would have been obvious to one in the ordinary skill in the art to know that the waiting node is actively looking for an indicator for the end of transmission (col3, lines 12-44).

Baya also discloses that users are only allowed to utilize the network resource once they receive a "free token". Based on the broadest claim interpretation of the current claim language the examiner believes that both Bayada and Ratner anticipate the limitations presented in the claim language of the claimed invention.

Applicant is advised that applied prior art can be circumvented if the applicant incorporates the unique details about "lineup insertion packet" and "end of transmission indicator" as described in the specification into the claim language so that the examiner can clearly distinguish these entities.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3924. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AB

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